

REMARKS

The Official Action mailed October 9, 2003, has been received and its contents carefully noted. Filed concurrently herewith is a *Request for One Month Extension of Time*, which extends the shortened statutory period for response to February 9, 2004. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on August 20, 2001, and July 2, 2003.

Claims 1-34 were pending in the present application prior to the above amendment. Claims 27-30 have been canceled, independent claims 1, 2, 7 and 8 have been amended to better recite the features of the present invention, and claims 3-6, 9, 10, 18, 20, 22, 24, 26 and 31-34 have been amended to correct minor matters of form. The Applicants note with appreciation the allowance of claims 9-14, 19-26 and 31-34. Accordingly, claims 1-26 and 31-34 are now pending, of which claims 1, 2 and 7-12 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Applicants note that in the *Amendment* filed July 10, 2002, in the preamble of claims 18, 20, 22, 24 and 26, it appears a mistake was made in preparing the claims. Specifically, the preamble was inadvertently changed to "A method of supporting a flexible substrate." It appears that the preamble of claims 4 and 6 was mistakenly copied into claims 18, 20, 22, 24 and 26. The Applicants have corrected this error in the present *Amendment*.

Also, in the *Amendment* filed July 2, 2003, although claim 25, line 3, was not marked-up using strikethrough and underlining, the Applicants note that correction of a minor typographical error ("polyether sulfon" was changed to "polyether sulfone") was made.

Paragraph 4 of the Official Action rejects claims 1, 2, 3, 5, 27 and 28 as anticipated by U.S. Patent No. 6,533,968 to Feist et al. in view of Smithsonian Physical Tables (Ninth Revised Edition). The Applicants respectfully submit that an anticipation

rejection cannot be maintained against the independent claims of the present invention, as amended.

As stated in MPEP § 2131, to establish an anticipation rejection, each and every element as set forth in the claim must be described either expressly or inherently in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Feist and the Smithsonian Physical Tables do not teach all the elements of amended independent claims 1 and 2, either explicitly or inherently. Independent claims 1 and 2 have been amended to include features from allowed claims 9 and 10, respectively. Specifically, claim 1 has been amended to recite a method of manufacturing a semiconductor device comprising the steps of fixing a flexible substrate having thermal shrinkage to a holding frame, heating the fixed flexible substrate at a temperature that the flexible substrate is thermal-shrunk, and forming a conductive film on the flexible substrate by a sputtering method. Claim 2 has been amended to recite a method of manufacturing a semiconductor device comprising the steps of fixing an outer circumference of a flexible substrate having thermal shrinkage to a frame-shaped holding frame, heating the fixed flexible substrate at a temperature that the flexible substrate is thermal-shrunk, and forming an amorphous semiconductor film on the flexible substrate by a plasma CVD method. Feist and the Smithsonian Physical Tables do not teach all the above-referenced elements of the independent claims, either explicitly or inherently.

Since Feist and the Smithsonian Physical Tables do not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(e) are in order and respectfully requested.

Paragraph 6 of the Official Action rejects claims 4 and 6 as obvious based on the combination of Feist, the Smithsonian Physical Tables and U.S. Patent No. 6,028,351 to Klonis et al. The Applicants respectfully submit that a *prima facie* case of obviousness

cannot be maintained against the independent claims of the present invention, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Klonis does not cure the deficiencies in Feist and the Smithsonian Physical Tables. The Official Action relies on Klonis to allegedly teach a frame comprising a ceramics-metal complex (page 3, Paper No. 19). Feist, the Smithsonian Physical Tables and Klonis, either alone or in combination, do not teach or suggest a method of manufacturing a semiconductor device comprising the steps of fixing a flexible substrate having thermal shrinkage to a holding frame, heating the fixed flexible substrate at a temperature that the flexible substrate is thermal-shrunk, and forming a conductive film on the flexible substrate by a sputtering method (claim 1) or forming an amorphous semiconductor film on the flexible substrate by a plasma CVD method (claim 2).

Since Feist, the Smithsonian Physical Tables and Klonis do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Paragraph 7 of the Official Action rejects claims 7, 8, 15, 17, 27 and 28 as obvious based on the combination of Feist, the Smithsonian Physical Tables, and U.S. Patent No. 4,915,894 to Mitsui et al. The Applicants respectfully submit that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present invention, as amended.

Feist, the Smithsonian Physical Tables and Mitsui do not teach or suggest all the elements of amended independent claims 7 and 8, either explicitly or inherently. Independent claims 7 and 8 have been amended to include features from allowed claims 11 and 12, respectively. Specifically, claim 7 has been amended to recite a method of manufacturing a semiconductor device comprising the steps of fixing a flexible substrate having thermal shrinkage to a holding frame, heating the fixed flexible substrate at a temperature that the flexible substrate is thermal-shrunk, and forming a predetermined pattern over the flexible substrate by screen printing. Claim 8 has been amended to recite a method of manufacturing a semiconductor device comprising the steps of fixing an outer circumference of a flexible substrate having thermal shrinkage to a frame-shaped holding frame, heating the flexible substrate at a temperature that the flexible substrate is thermal-shrunk, and forming a predetermined pattern over the flexible substrate by laser processing. Feist, the Smithsonian Physical Tables and Mitsui do not teach or suggest all the above-referenced elements of the independent claims, either explicitly or inherently.

Since Feist, the Smithsonian Physical Tables and Mitsui do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.


Paragraph 8 of the Official Action rejects claims 16 and 18 as obvious based on the combination of Feist, the Smithsonian Physical Tables, Mitsui and Klonis. The Applicants respectfully submit that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present invention, as amended.

Klonis do not cure the deficiencies in Feist, the Smithsonian Physical Tables and Mitsui. As noted above, the Official Action relies on Klonis to allegedly teach a frame comprising a ceramics-metal complex. Feist, the Smithsonian Physical Tables, Mitsui and Klonis, either alone or in combination, do not teach or suggest a method of manufacturing a semiconductor device comprising the steps of fixing a flexible substrate having thermal shrinkage to a holding frame, heating the fixed flexible substrate at a temperature that the flexible substrate is thermal-shrunk, and forming a predetermined pattern over the flexible substrate by screen printing (claim 7) or forming a predetermined pattern over the flexible substrate by laser processing (claim 8).

Since Feist, the Smithsonian Physical Tables, Mitsui and Klonis do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,



Eric J. Robinson
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.
PMB 955
21010 Southbank Street
Potomac Falls, Virginia 20165
(571) 434-6789